

IDEAL-Arcola Heating Outfits



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*For small cottages, bungalows, flats,
stores, offices, schools, churches, sta-
tions and small business buildings*

AMERICAN RADIATOR COMPANY

NEW YORK 104-108 W. Forty-second St.
NEW YORK (BRONX)
BOSTON E. 149th and Harlem River Terminal
PROVIDENCE 129-131 Federal St.
WORCESTER 54 Exchange Place
SPRINGFIELD (MASS.) 58 Front St.
PORTLAND (ME.) 823 Third Nat'l Bank Bldg.
NEW HAVEN 416-18 Commercial St.
ALBANY S. Front and River Streets
NEWARK 3 and 4 The Plaza
PHILADELPHIA 402 Broad St.
HARRISBURG 115 N. Broad St.
WILKESBARRE 110 N. Second St.
READING 54 W. Market St.
BALTIMORE 103 N. Sixth St.
WASHINGTON 336 N. Charles St.
NONFOLK 1308 H. St., N. W.
RICHMOND 207-211 Royster Bldg.
SYRACUSE 421 N. Seventeenth St.
ROCHESTER 305 Union Bldg.
BUFFALO 127 Cutler Bldg.
PITTSBURGH 693 Main St.
CINCINNATI 300 Wood St.
COLUMBUS Fourth and Elm Sts.
COLUMBUS 310 E. Broad St.

DAYTON 221 N. Main St.
LOUISVILLE 331 Guthrie St.
ATLANTA 508 Candler Bldg.
BIRMINGHAM 703-10 American Bank Bldg.
NEW ORLEANS 714 Canal-Commercial Bldg.
CLEVELAND 1848 Euclid Ave.
DETROIT 159 W. Jefferson Ave.
GRAND RAPIDS 44 Division Ave., N.
CHICAGO 816-822 S. Michigan Ave.
MILWAUKEE 388 Broadway
INDIANAPOLIS 243 N. Pennsylvania St.
PEORIA 416 Fulton St.
ST. LOUIS 410 N. Broadway
MINNEAPOLIS 930 Nicollet Ave.
ST. PAUL 688 Hampden Ave.
DULUTH 227 W. First St.
DES MOINES 521-522 Hubbell Bldg.
OMAHA 413-417 S. Tenth St.
KANSAS CITY 1230 Walnut St.
DENVER 402 Seventeenth St.
SAN FRANCISCO Second and Townsend Sts.
LOS ANGELES 100 San Fernando Arcade
SEATTLE 1219-21 Fourth Ave.
PORTLAND (OREGON) 413 Yeon Bldg.
SPOKANE 1019 Paulsen Bldg.



Mothers appreciate better than fathers what it means to have heat that always can be depended upon. The ARCOLA home becomes a true haven of comfort.



Serves as a Boiler-Radiator

THE Ideal-ARCOLA Boiler has revolutionized the warming of small buildings, for it places the wonderful comfort and fuel economy of Hot Water Heating within the reach of owners of cellarless bungalows, small city and farm cottages, one-story stores and office buildings, small country school-houses, country resort-cottages, small churches and chapels, garages, interurban street-car and railroad stations, weighing rooms, village firehouses, police stations, etc. In its neat, compact, and low-priced form, the Ideal-ARCOLA Boiler offers the solution of a long cherished aim—to give every small building owner and tenant the joy and economy of ample, cleanly, healthful, coal-saving hot water radiator warmth, with freedom from fire risk. All rooms are kept *uniformly*, genially warm, at night as well as through the coldest day. High winds cannot arrest nor chilling cold offset its ample flow of warmth.

An Unsolicited Letter of Appreciation by an ARCOLA Owner

“For thirteen years I have been using grates and stoves and have done nothing but carry out ashes and carry in coal all these years, and on top of that almost freeze to death whenever the thermometer went as low as ‘freezing.’

“Since having your system installed, I am using no more coal to heat the entire house than I formerly used in one stove, or in one grate, and besides had a cold house. Now—my house is of even temperature from the front to the back, and it is a genuine pleasure to return from the theatre and find your house in an even temperature.

“I am so well pleased with my ARCOLA that I hope you sell every man in Memphis that needs one, and you are at liberty to use this letter in any manner you see fit. If the people have any doubt whatever as to the genuineness of this letter, they may call at my residence, and we will take pleasure in showing them the plant. Our dream of comfort came true.”



Ideal-ARCOLA Radiator-Boiler

One of the world's newest and greatest inventions. It is unique—being both a Boiler and a Radiator. Takes the place of a parlor stove, and circulates its excess heat through small pipes connecting AMERICAN Radiators stationed in adjoining rooms. The ARCOLA may be painted or enameled in any shade or color to match woodwork or decorations. It is not obtrusive like a stove but may be painted to harmonize with any furnishings.



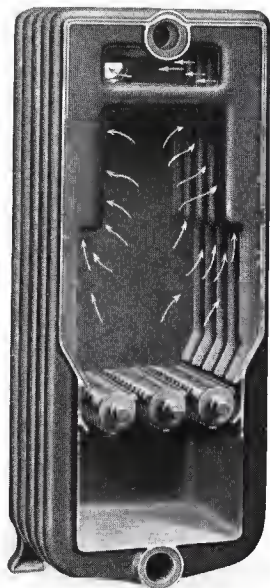
Unique and Practical Features

THE ARCOLA Boiler is peculiarly adapted for use in those two- and three-story flat buildings where each tenant prefers to run his own heating outfit to suit his family's needs or preferences as to exact degree of warmth, or pocket-book; and without going to a cellar to attend the fire.

Similarly, it fits the needs of thousands of combination store and flat buildings, where the store-keeper and the family above each prefers or requires an independent heating outfit, and finds it difficult or inconvenient to go to the cellar or divide the use or care of cellar-set boilers or hot air furnaces.

The ARCOLA Boiler is unique, in that it serves both as Boiler and Radiator, distributing its heat to the room in which it is placed and yet developing a great enough quantity of heat from a small amount of coal to warm cozily several additional rooms. Its pleasing appearance and small size permit the ARCOLA to be placed in any room having chimney connection.

Instead of the air of the room coming in contact with the highly-heated, or at times red-hot surfaces of a stove, and thereby causing a burned-out, devitalized, unhealthful condition of the atmosphere, the Ideal-ARCOLA Boiler and AMERICAN Radiators softly radiate their gentle, cleanly, sanitary warmth to the air of the rooms just as in all hot water radiator heating. This IDEAL outfit will change any house into a *home*—will annually give 5,600 hours of winter comfort—every hour of the season!



Front section of Ideal-ARCOLA removed to show the large fuel-holding capacity which makes frequent coaling unnecessary, and holds the fire over-night.



The Ideal-ARCOLA is, in fact, a Boiler-Radiator, warming the room wherein it is placed, yet developing the quantity of heat necessary for four or five radiators to warm cozily as many additional rooms. Pipe connecting to radiators is here concealed in walls and partitions, but may be run exposed in corners, thus aiding to warm the room.



The Ideal-ARCOLA is a most convenient and inexpensive method of cheering the summer resort cottage (usually without a cellar), when the sudden cool evenings come—or extend the enjoyment of the woods and country into the late autumn. The piping is here exposed but ordinarily is run between walls and floors.



Most Simple to Run

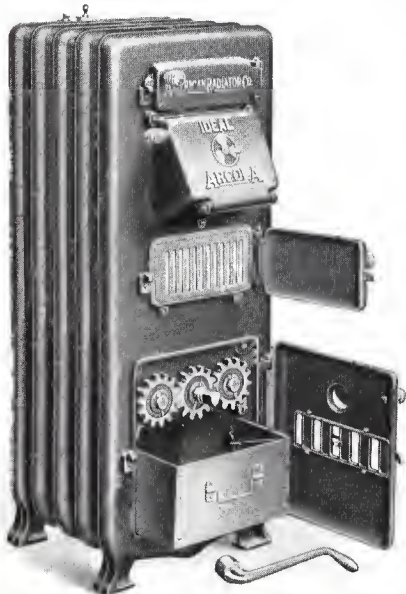
THE Ideal-ARCOLA Boiler is in general purpose like a stove, as it heats the room in which it is placed. But is unlike a stove in that the spaces between its hollow or double walls are filled with water which, as heated, expands and circulates through connected piping to hot water radiators in adjoining rooms. The water rises as it is heated, and as it cools in the radiators (by parting with some of its warmth to the air of the rooms), the cooler and therefore heavier water returns to the Boiler to be reheated, over and over again. Connection to pressure or city water supply for refilling is desirable, but not necessary, as the outfit may be filled with a bucket at the expansion tank.

Warms All Over—Not “In Spots”

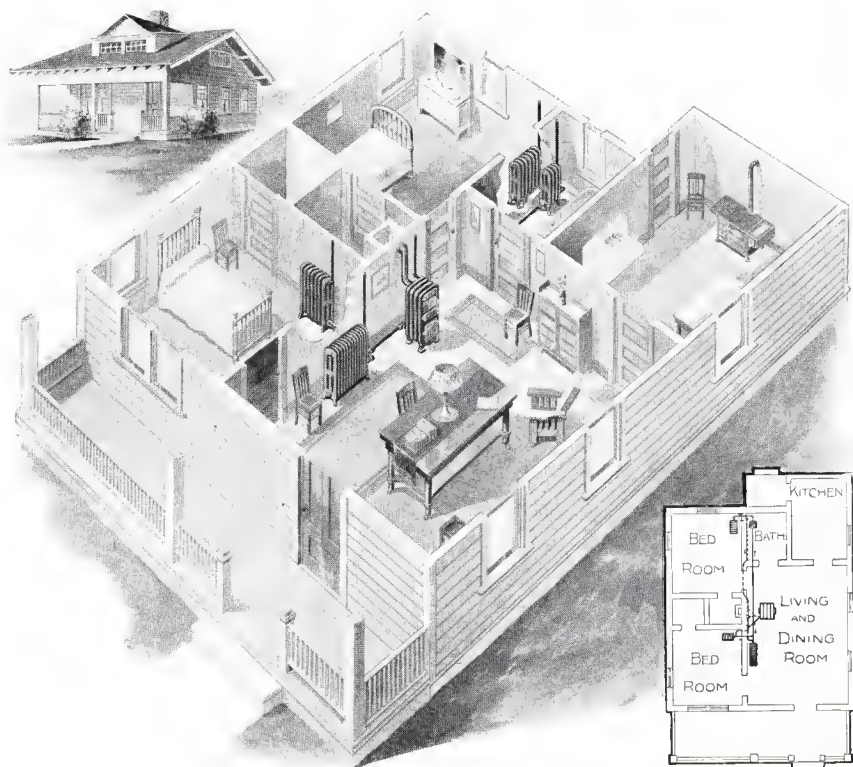
A stove heats “in spots” only the room in which it is located, but the Ideal-ARCOLA Boiler warms genially and uniformly

2, 3, 4, or 5 rooms, according to the number and size of radiators connected to it by piping. The same water is used over and over, for years.

The heat from the burning fuel is rapidly transmitted to the surrounding water, and as water is the greatest known medium for conveying heat, practically every bit of the available volume of heat is distributed evenly to the rooms instead of being largely wasted up the chimney, as in stove-heating methods. Hence, the great fuel economy of the Ideal-ARCOLA Boiler, which soon repays its cost to the building-owner or tenant.



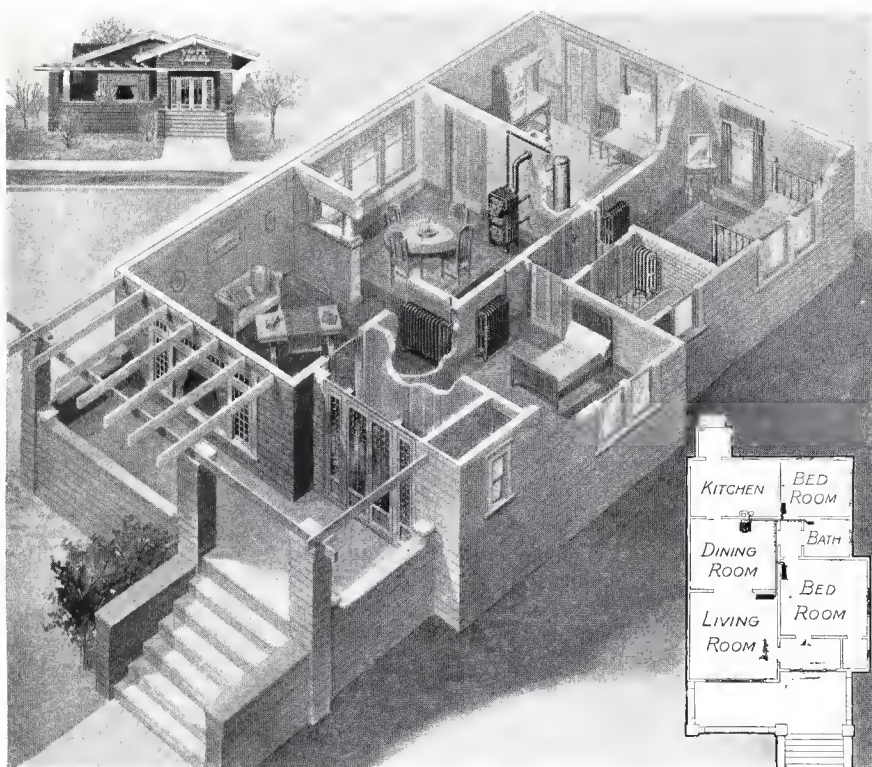
Note the large, slanting fire-door, the tight-fitting doors, and the deep, snug-fitting ash pan of the Ideal-ARCOLA.



Illustrates the simplicity of installation of an Ideal-Arcola Boiler and AMERICAN Radiators in a *cellarless* bungalow. The piping is usually run out of sight, within walls or partitions, but is here exposed to correct the impression still prevailing that the piping of a radiator heating job is at all intricate or difficult.

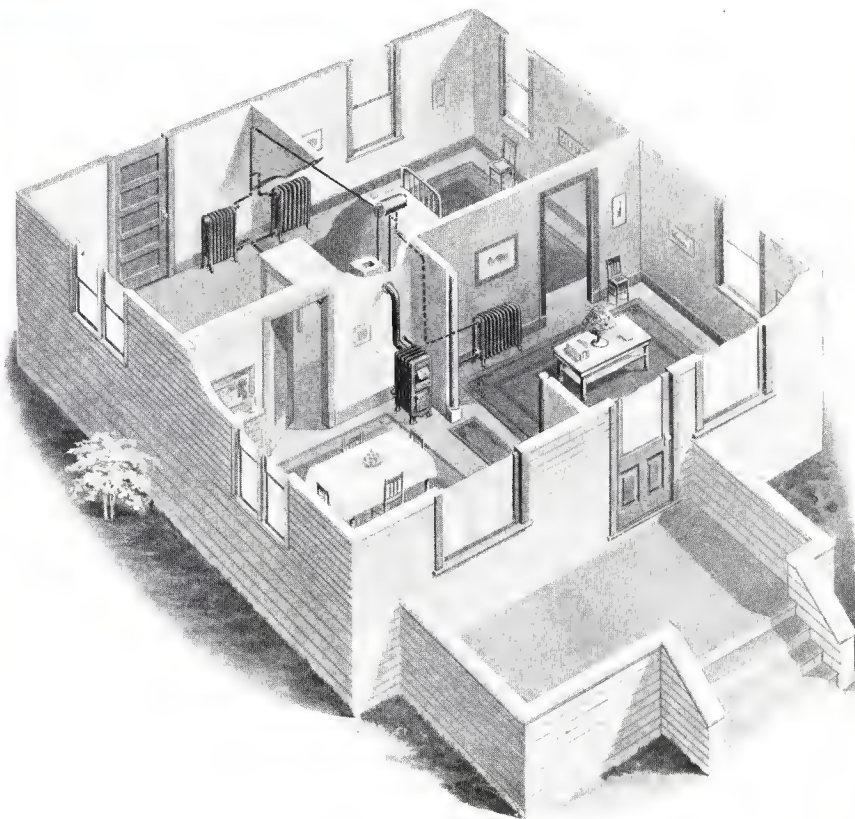
Is an Investment—Not an Expense

EVEN the \$15 a month tenant would be glad to pay \$1.50 a month extra for this IDEAL Hot Water Heating, as it would save the tenant's investing six times that amount in a short-lived stove with its one-room "spotty" heating. Does



Illustrates how simply an Ideal-ARCOLA outfit is placed in cottage, whether it has a cellar or not. The ARCOLA could just as well be set in kitchen, if preferred. Piping is here shown exposed (though the piping is usually run in partitions or under floors) to indicate how little piping is necessary. No valves are used.

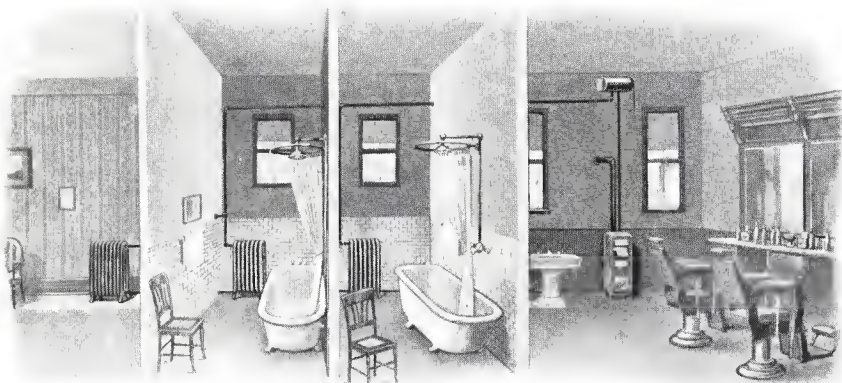
away with the annual blacking, taking down and storing of stoves. And the \$1.50 a month increased rental is good interest to the building owner and secures him a better satisfied, longer-staying tenant. The Ideal-ARCOLA is therefore an *investment*, not an expense, as it will outwear the building itself.



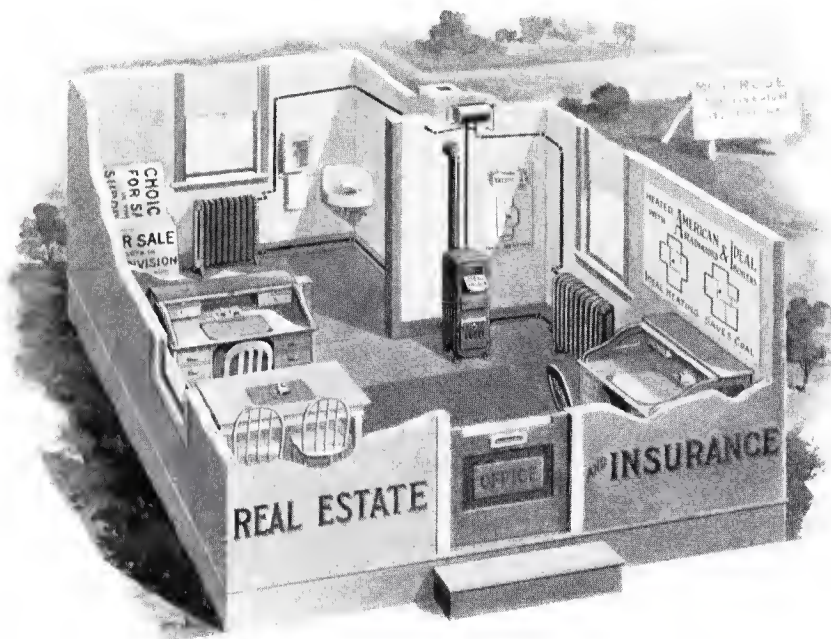
The Ideal-ARCOLA Boiler is here placed in the dining-room, thereby serving the same purpose as a base-burner or parlor stove, yet circulating its excess heat to the three AMERICAN Radiators in adjoining rooms. All rooms heated by one fire!

Makes Cellars Unnecessary

A CELLAR is not needed for the Ideal-ARCOLA Boiler, which excavation in itself usually equals the entire cost of this IDEAL heating outfit—makes it far cheaper to install than a hot air furnace. Valves are not needed on a single-floor bungalow, because it is easier to open or close the draft damper of the boiler than to turn on or off the radiator valve. Very, very simple.



This illustrates how an Ideal-ARCOLA Boiler and American Radiators are used to warm a barber shop, baths, and a living-room at rear. In a similar way other kinds of store buildings having no cellar may be hot water radiator heated.



For seven months of the year, real-estate subdivisions and unheated office buildings offer bleak, cheerless arguments on home-building to prospective buyers. An Ideal-ARCOLA Boiler and a few AMERICAN Radiators correct this condition and lead intending buyers and builders to visualize the cozily warm suburban home of their hopes and ambition.



Many a family for the first time realizes its dream of comfort with the installation of an ARCOLA. Winter evenings are more thoroughly enjoyed. With all the rooms genially warm, with chill and drafts unknown, the happiness of the family circle is complete.

Father considers the ARCOLA as the real guardian of his loved ones, for when he is away he knows that the home is uniformly and safely warmed and the family health protected.

The ARCOLA is instantly ready to offset the capricious changes of any climate. The sudden blizzard or the damp chill of early spring and fall days is hardly noticed by those whose homes are protected by ARCOLA.

The outfit guarantees the lowest cost heating, the greatest fuel economy and outlasts the building itself.



Changed in Size at Any Time

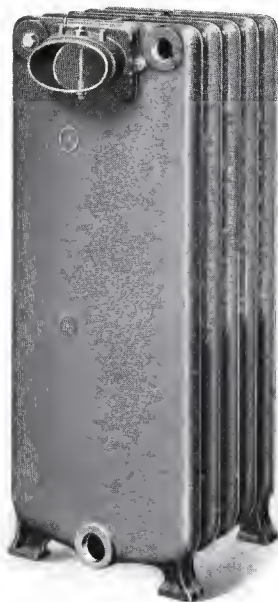
UNLIKE stoves and hot air furnaces (parts of which warp, loosen or burn out in a few years), the water-backed, solidly constructed Ideal-ARCOLA Boiler will easily outwear the building in which it is placed, and can at any time be used again in other buildings. Ideal-ARCOLA Boilers and AMERICAN Radiators are made in sections or units, so that as buildings or rooms are altered in size (65 percent of all buildings are remodeled) extra sections may be added at any time to suit new heating requirements.

ARCOLA "Safety First" Heating

It is cleanly and healthful, and because of the low temperature at which the water circulates (every bit of the outer surfaces being backed by water), children may play around the ARCOLA in safety. The legs of the Ideal-ARCOLA Boiler are solid and there is no risk of overturning, as is a danger common to stoves, with consequent fire risk to family and building.

It is easy to empty and fill the outfit if family is absent for a protracted period. Ordinarily the same water is, as stated, used over and over again for many years.

No other feature of building equipment offers equal benefits and savings to the upkeep of the home; protection to the well-being of the family; and doing away with the drudgery of attending to many fires.



Rear view of Ideal-ARCOLA Boiler, showing dampered smoke pipe connection, and flow and return tappings.



The two views above are parts of a panoramic photograph taken of a suburb of Portsmouth, Va. The 324 cottages in this housing group are all heated with Ideal-ARCOLA Heating Outfits. 297 of these cottages are heated with No. 2 Ideal-ARCOLA Boilers and 27 of them with No. 3's.

Solves Community Housing

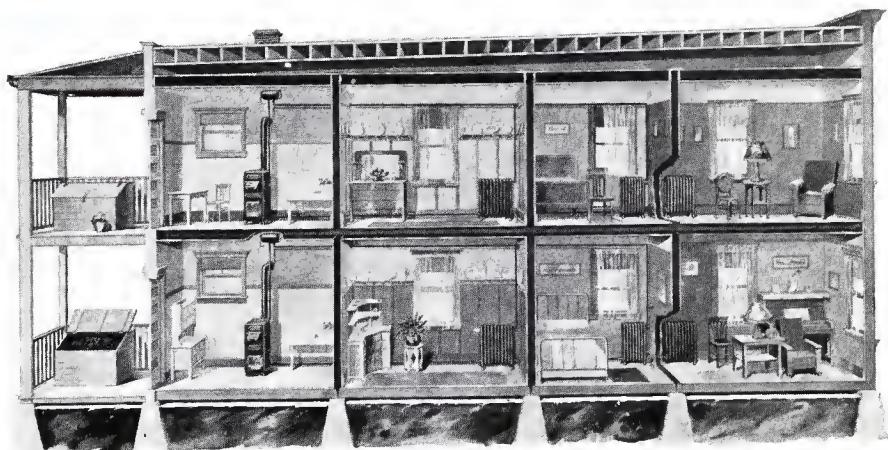
THE central problem in all plans for community housing (many houses built on the same general plan) is to give the family of the clerk or the mechanic the benefit of sanitary warmth, at minimum cost and least domestic labor. The Ideal-ARCOLA wonderfully solves this great need, so that in all respects every home, however humble, may now enjoy IDEAL comfort and fuel economy. Besides, the outfit will not rust out or wear out—hence is a *lasting investment*.



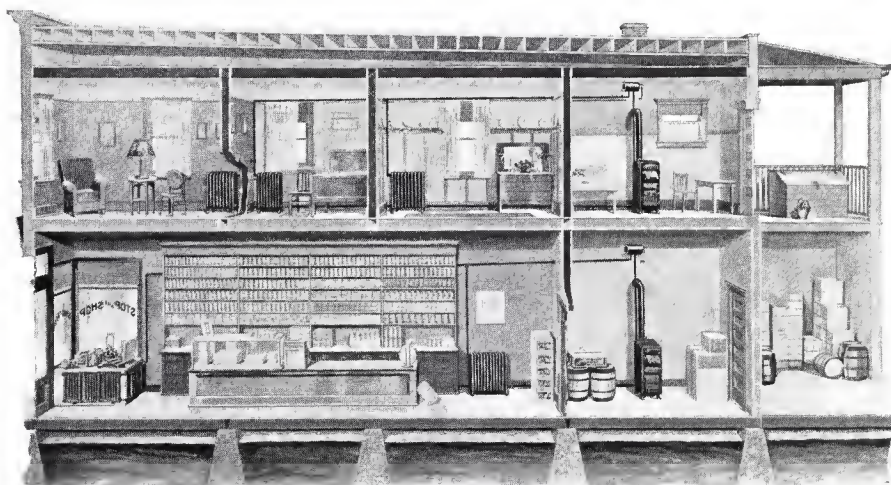
Unlike the old-fashioned stove, which warms only "in spots" on windy days, this outfit of an Ideal-ARCOLA Boiler and AMERICAN Radiators distributes the soft, health-protecting warmth *uniformly* to all parts of this cellarless schoolhouse. The above photograph shows the interior of a small school near Green Bay, Wis., heated by a No. 5 Ideal-ARCOLA and AMERICAN Radiators—where winter *is* winter and a durable and efficient heating plant is an absolute necessity.

A Boon to Country Schools

PERHAPS the chief reason why there is more tuberculosis in the country than in the city is the uneven heating of the cellarless country school, heated in spots with a stove which "roasts" a few scholars in the effort to send a little heat to the chilled scholars in the farthest corners. The ARCOLA and AMERICAN Radiators offer the sure remedy of *even*, mild, healthful warmth for all alike.



As often happens where two or more families occupy a building and there is no janitor service available, this arrangement of separate heating outfits (consisting of an Ideal-Arcola Boiler with a few AMERICAN Radiators connected thereto) offers a fine solution, as each tenant easily takes care of his simple heating outfit on his own floor without going to the cellar (if there is a cellar) to attend to the fire. Each tenant controls the heat to suit his own needs, and if a flat is temporarily unoccupied, this arrangement permits saving the fuel. The piping is run in walls or under floors, or exposed as shown.



The Ideal-Arcola Boiler fits wonderfully the heating needs of combination store and flat buildings, where the storekeeper and the family above each prefers or requires an independent heating outfit to yield greater or less heat to suit, and finds it difficult or inconvenient to go to the cellar, or divide the use or care of cellar-set boilers or hot air furnaces. Extra sections may be added at any time to the Ideal-Arcola or radiators to suit the varying heating needs of future store tenants. Piping can be hidden in walls and floors, if desired.

Stops Trips to Cellar

THE Ideal-ARCOLA Boiler being located on the same floor level as the radiators, enables convenient coaling without going to cellar or basement, as in the case of the ordinary heating boiler or hot air furnace installation. The fact that this Boiler-Radiator is used to warm the room in which it is placed will save a goodly percentage of the fuel bill, which in the ordinary method of installation would be unavoidably used in heating the basement.

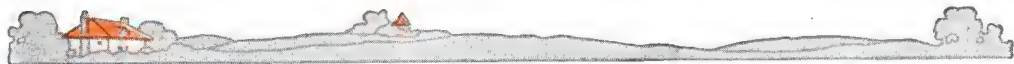
The saving of one ton only of coal in a year, made possible by the fuel economy of the Ideal-ARCOLA Boiler, will equal the interest on \$100 or more, hence the purchase of one of these outfits is a *paying investment*. Besides, you enjoy all the comfort, convenience, and healthfulness of this *ideal* way of heating.

Ideal-ARCOLA Boilers are wonderfully simple—shipped complete in crate, ready to be set in place. In houses and other buildings already erected, the Ideal-ARCOLA Heating outfit can be put in, including the necessary simple piping, without removing stoves until the new heating outfit is ready to fire up. Quickly set up during winter weather when old, crude stoves or hot air furnaces get badly warped or commence to collapse.

Sold by all heating contractors everywhere. Calls and correspondence cordially invited.



An Ideal-ARCOLA Boiler packed complete in its crating, ready for shipment. All ready to be set in place and fire, on delivery at building.



"Good Night" in warmth and safety! The even temperature of hot water heat protects the health of children and relieves the anxiety of mothers. Growing children are like flowers—they flourish and bloom best in hot water heated homes.



Features of ARCOLA Value

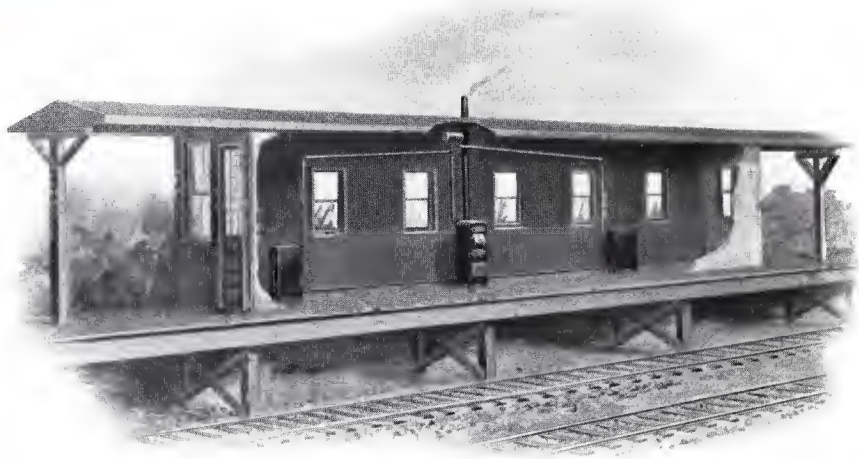
1. Scientific in Fuel Conservation.
2. Compact, Attractive, and Long-lasting.
3. Large Fuel Space—makes frequent coaling unnecessary.
4. Vertical Flues—are self-cleaning and assure efficient operation.
5. Revolving Grates—enable fire to be cleaned with ease.
6. Waterbacked Base—may be set on wooden floor.
7. Nickel-plated Trimmings and Graceful Lines—give heater neat appearance.
8. The Spout-shaped Fire Door Opening—enables fuel to be charged without spilling.
9. Sliding Draft Door—enables perfect regulation of fire.
10. Extensive Exterior Heating Surface—supplies heat for room in which ARCOLA stands.
11. Deep, Snug-fitting Ash Pan—insures cleanliness.
12. Large Clearance Between Base and Floor—facilitates Cleaning under ARCOLA.
13. Legs Are Cast Solid—cannot be kicked out as with stove—therefore prevents risk of injury or fire.



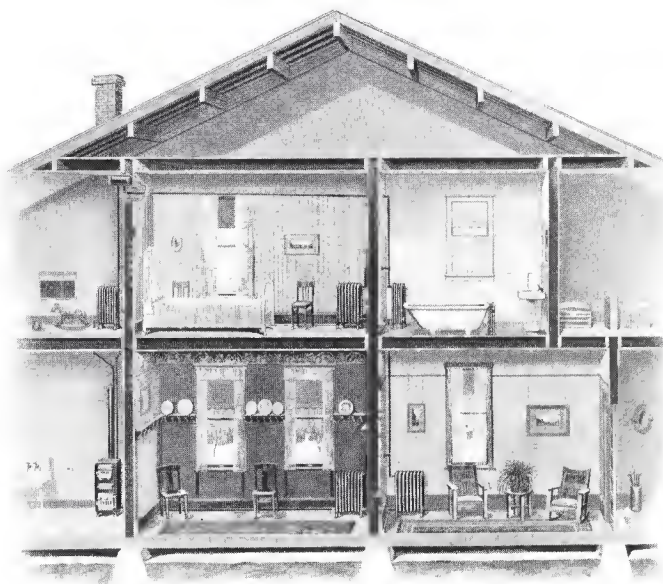
Typical Indiana town cottage heated by a 3PA-250 Ideal-ARCOLA Heating Outfit



Typical mid-western farm home heated by a 5PA-425 Ideal-ARCOLA Heating Outfit.



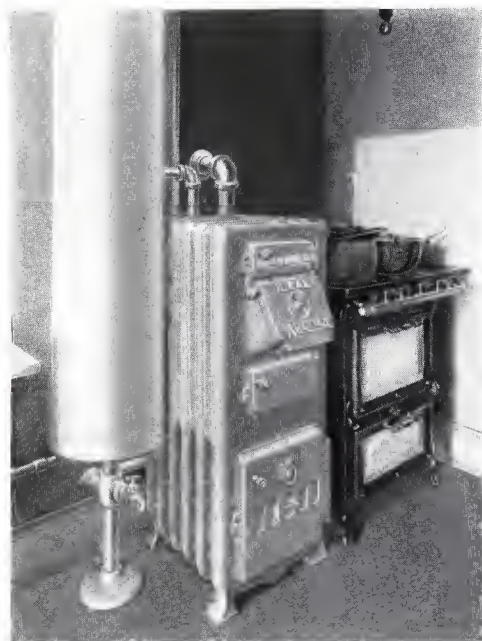
Illustrating the simple, wholesome heating of an interurban street-car or railroad station by an outfit of Ideal-Arcola Boiler and AMERICAN Radiators.



Showing how a two-story house *without a cellar* is most simply hot water heated by Ideal-Arcola Boiler and a few AMERICAN Radiators. Note how little and simple the piping, which can, if desired, be hidden in walls or under floors.



Typical group of six small houses in Washington, D. C., each heated by an outfit of an Ideal-ARCOLA Radiator-Boiler and AMERICAN Radiators. The end houses are heated with No. 3 Ideal-ARCOLA, and the middle houses with No. 2 Ideal-ARCOLA.

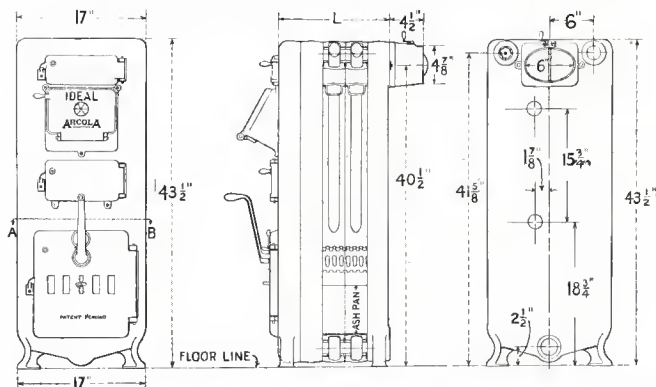


Shows the Ideal-ARCOLA set up in typical kitchen of above houses as well as heating the domestic Hot Water Supply in the 30-gallon tank at left.

Sold in Units or Sections

OWNERS can at first buy a small size Ideal-ARCOLA and a few AMERICAN Radiators, and later on other sections can be added to the ARCOLA to give greater capacity and to warm additional radiators in other rooms you then wish heated. Sixty-five per cent of all buildings are remodeled or enlarged to fit changing conditions or growing families.

Dimensions and Ratings



Smoke pipe connection, oval, 6 inches longest diameter. Flow pipe tapping, 2 inches (one tapping plugged). Return pipe tapping, 2 inches. In figuring the square feet of radiation required for the room in which the Ideal-Arcola Boiler stands, allow for the Boiler itself about 20 square feet for the No. 1 and 5 square feet additional for each size larger.



This little ARCOLA Hot Water Heating Outfit in Stoltz's Sweet Shop, Sheyboygan, Wisconsin, contributes great comfort and attractiveness and helps to make Stoltz's the most popular place in town.



Some Questions Answered

THE Ideal-ARCOLA Boiler may be set in any room having a chimney flue connection. The Boiler should, of course, be placed as close to chimney flue opening as possible, to secure every advantage of a good draft.

Contrary to popular belief, it is simply a matter of good piping proportions to erect hot water heating for one-story, where there is no cellar. It is equally simple to pipe one floor *only* of a two- or three-story family or store building. It is only necessary that the flow pipe should extend upward as high as possible, then pitching (not less than 1 inch in every 10 feet) nearly horizontally away from the Boiler toward the Radiators. The return main or pipe should be set in such position that return may be run direct to Boiler.

The principle involved is a simple one of gravity circulation of the water from the heat generator—the Boiler—through the flow pipe leading from the top of the Ideal-ARCOLA, and the return of the water as it imparts its heat and becomes cooler, consequently more dense, therefore heavier, and so, by natural law, falls to the bottom or point farthest remote from the flow connection, and then through the return pipe to the bottom or return tapping of the boiler, to be reheated and again continue its journey. This is why hot water heating is the most efficient and ideal method of heating the home known to modern science.

By avoiding the extending of piping and expansion tank to any location where they are not protected, particularly in space between ceiling and roof, also by connecting a drain cock with the lowest point of the installation (so that entire system may be drained if the building is vacated in cold weather) freezing may be prevented. The expansion tank will automatically relieve the heating system of air and allow for the expansion of water when heated, as water when heated from 40 to 180 degrees Fahrenheit will increase in bulk or volume about one-twentieth.



Ideal-ARCOLA Heating Outfits



Outfits include ARCOLA Expansion Tank and Water Gauge, Drain Cock $\frac{3}{4}$ -in. and Vent Fitting. Outfit does not, of course, include labor, pipe and fittings, which vary with the size of the installation, and for which your heating contractor will give estimate. Radiation will be made up in any number of radiators desired. No radiator valves or air valves are necessary.

Order Number	Outfits consist of Ideal-ARCOLA Boiler, Regular 38-inch high AMERICAN Peerless, 3-Column Radiators as listed below, Expansion Tank and Drain Valve							
	Consists	of	No.	1	Ideal-ARCOLA	with	75	Sq. Ft. of Radiation
1-PA-75	"	"	"	1	"	"	100	" " " "
1-PA-100	"	"	"	1	"	"	125	" " " "
1-PA-125	"	"	"	1	"	"	150	" " " "
1-PA-150	"	"	"	1	"	"	175	" " " "
2-PA-175	"	"	"	2	"	"	200	" " " "
2-PA-200	"	"	"	2	"	"	225	" " " "
2-PA-225	"	"	"	2	"	"	250	" " " "
3-PA-250	"	"	"	3	"	"	300	" " " "
3-PA-300	"	"	"	3	"	"	350	" " " "
4-PA-350	"	"	"	4	"	"	400	" " " "
5-PA-400	"	"	"	5	"	"	450	" " " "
5-PA-450	"	"	"	5	"	"		" " " "

See the ARCOLA

Get an estimate from your heating contractor for installing an ARCOLA Outfit in your home. Put in quickly and easily at any time without disturbance. Ideal-ARCOLA Outfits may be seen set up in any of our public show-rooms (see list, page 1); also in stores of many dealers and in the homes of thousands of owners. Investigate today!





IDEAL-Arcola
Hot Water Heating
for Small Homes